

# Chih-Yu Chang

## List of Publications by Year in descending order

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66  
papers

3,342  
citations

126858

33  
h-index

143943

57  
g-index

68  
all docs

68  
docs citations

68  
times ranked

4747  
citing authors

#	ARTICLE	IF	CITATIONS
1	Suppressed Charge Recombination in Inverted Organic Photovoltaics via Enhanced Charge Extraction by Using a Conductive Fullerene Electron Transport Layer. <i>Advanced Materials</i> , 2014, 26, 6262-6267.	11.1	206
2	High-Performance, Air-Stable, Low-Temperature Processed Semitransparent Perovskite Solar Cells Enabled by Atomic Layer Deposition. <i>Chemistry of Materials</i> , 2015, 27, 5122-5130.	3.2	203
3	Interfacial Engineering of Ultrathin Metal Film Transparent Electrode for Flexible Organic Photovoltaic Cells. <i>Advanced Materials</i> , 2014, 26, 3618-3623.	11.1	178
4	Non-halogenated solvents for environmentally friendly processing of high-performance bulk-heterojunction polymer solar cells. <i>Energy and Environmental Science</i> , 2013, 6, 3241.	15.6	168
5	Enhanced Performance and Stability of a Polymer Solar Cell by Incorporation of Vertically Aligned, Cross-Linked Fullerene Nanorods. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 9386-9390.	7.2	162
6	Combination of Molecular, Morphological, and Interfacial Engineering to Achieve Highly Efficient and Stable Plastic Solar Cells. <i>Advanced Materials</i> , 2012, 24, 549-553.	11.1	155
7	A solution-processed n-doped fullerene cathode interfacial layer for efficient and stable large-area perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2016, 4, 640-648.	5.2	119
8	Carbazole-Based Ladder-Type Heptacyclic Arene with Aliphatic Side Chains Leading to Enhanced Efficiency of Organic Photovoltaics. <i>Chemistry of Materials</i> , 2011, 23, 2361-2369.	3.2	111
9	A Versatile Fluoro-Containing Low-Bandgap Polymer for Efficient Semitransparent and Tandem Polymer Solar Cells. <i>Advanced Functional Materials</i> , 2013, 23, 5084-5090.	7.8	110
10	Design of a versatile interconnecting layer for highly efficient series-connected polymer tandem solar cells. <i>Energy and Environmental Science</i> , 2015, 8, 1712-1718.	15.6	101
11	Synthesis of a New Ladder-Type Benzodi(cyclopentadithiophene) Arene with Forced Planarization Leading to an Enhanced Efficiency of Organic Photovoltaics. <i>Chemistry of Materials</i> , 2012, 24, 3964-3971.	3.2	97
12	Dithienocarbazole-Based Ladder-Type Heptacyclic Arenes with Silicon, Carbon, and Nitrogen Bridges: Synthesis, Molecular Properties, Field-Effect Transistors, and Photovoltaic Applications. <i>Advanced Functional Materials</i> , 2012, 22, 1711-1722.	7.8	92
13	Di(4-methylphenyl)methano-C <sub>60</sub> Bis-Adduct for Efficient and Stable Organic Photovoltaics with Enhanced Open-Circuit Voltage. <i>Chemistry of Materials</i> , 2011, 23, 4056-4062.	3.2	90
14	Tacky Elastomers to Enable Tear-Resistant and Autonomous Self-Healing Semiconductor Composites. <i>Advanced Functional Materials</i> , 2020, 30, 2000663.	7.8	85
15	Enhanced Performance and Stability of Semitransparent Perovskite Solar Cells Using Solution-Processed Thiol-Functionalized Cationic Surfactant as Cathode Buffer Layer. <i>Chemistry of Materials</i> , 2015, 27, 7119-7127.	3.2	78
16	Highly Efficient Polymer Tandem Cells and Semitransparent Cells for Solar Energy. <i>Advanced Energy Materials</i> , 2014, 4, 1301645.	10.2	71
17	Simple mono-halogenated perylene diimides as non-fullerene electron transporting materials in inverted perovskite solar cells with ZnO nanoparticle cathode buffer layers. <i>Journal of Materials Chemistry A</i> , 2017, 5, 12811-12821.	5.2	69
18	Thin-film encapsulation of polymer-based bulk-heterojunction photovoltaic cells by atomic layer deposition. <i>Organic Electronics</i> , 2009, 10, 1300-1306.	1.4	66

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19	Achieving high efficiency and improved stability in large-area ITO-free perovskite solar cells with thiol-functionalized self-assembled monolayers. <i>Journal of Materials Chemistry A</i> , 2016, 4, 7903-7913.	5.2	64
20	Ladder-Type Nonacyclic Structure Consisting of Alternate Thiophene and Benzene Units for Efficient Conventional and Inverted Organic Photovoltaics. <i>Chemistry of Materials</i> , 2011, 23, 5068-5075.	3.2	58
21	Donor-Acceptor Random Copolymers Based on a Ladder-Type Nonacyclic Unit: Synthesis, Characterization, and Photovoltaic Applications. <i>Macromolecules</i> , 2011, 44, 8415-8424.	2.2	57
22	Increased Risk of Major Depression in the Three Years following a Femoral Neck Fracture—A National Population-Based Follow-Up Study. <i>PLoS ONE</i> , 2014, 9, e89867.	1.1	55
23	Room-Temperature Solution-Processed n-Doped Zirconium Oxide Cathode Buffer Layer for Efficient and Stable Organic and Hybrid Perovskite Solar Cells. <i>Chemistry of Materials</i> , 2016, 28, 242-251.	3.2	53
24	Diindenothieno[2,3-b]thiophene arene for efficient organic photovoltaics with an extra high open-circuit voltage of 1.14 eV. <i>Chemical Communications</i> , 2012, 48, 3203.	2.2	47
25	Solution-processed conductive interconnecting layer for highly-efficient and long-term stable monolithic perovskite tandem solar cells. <i>Nano Energy</i> , 2019, 55, 354-367.	8.2	47
26	Enhanced OLED performance upon photolithographic patterning by using an atomic-layer-deposited buffer layer. <i>Organic Electronics</i> , 2008, 9, 667-672.	1.4	45
27	Indacenodithieno[3,2-b]thiophene-based broad bandgap polymers for high efficiency polymer solar cells. <i>Polymer Chemistry</i> , 2013, 4, 5220.	1.9	42
28	The effect of thieno[3,2-b]thiophene on the absorption, charge mobility and photovoltaic performance of diketopyrrolopyrrole-based low bandgap conjugated polymers. <i>Journal of Materials Chemistry C</i> , 2013, 1, 7526.	2.7	38
29	High-Performance Flexible Tandem Polymer Solar Cell Employing a Novel Cross-Linked Conductive Fullerene as an Electron Transport Layer. <i>Chemistry of Materials</i> , 2015, 27, 1869-1875.	3.2	38
30	Highly-Efficient and Long-Term Stable Perovskite Solar Cells Enabled by a Cross-Linkable n-Doped Hybrid Cathode Interfacial Layer. <i>Chemistry of Materials</i> , 2016, 28, 6305-6312.	3.2	38
31	Efficient and air-stable plastics-based polymer solar cells enabled by atomic layer deposition. <i>Journal of Materials Chemistry</i> , 2011, 21, 5710.	6.7	37
32	Efficient all polymer solar cells from layer-evolved processing of a bilayer inverted structure. <i>Journal of Materials Chemistry C</i> , 2014, 2, 416-420.	2.7	37
33	Highly efficient and stable organic solar cell modules processed by blade coating with 5.6% module efficiency and active area of 216 cm <sup>2</sup> . <i>Progress in Photovoltaics: Research and Applications</i> , 2019, 27, 264-274.	4.4	34
34	Alternating copolymers incorporating cyclopenta[2,1-b:3,4-b']dithiophene unit and organic dyes for photovoltaic applications. <i>Journal of Polymer Science Part A</i> , 2011, 49, 1791-1801.	2.5	33
35	An integrated approach towards the fabrication of highly efficient and long-term stable perovskite nanowire solar cells. <i>Journal of Materials Chemistry A</i> , 2017, 5, 22824-22833.	5.2	33
36	Efficient semitransparent organic solar cells with good color perception and good color rendering by blade coating. <i>Organic Electronics</i> , 2017, 43, 196-206.	1.4	32

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37	Enhanced output performance and stability of triboelectric nanogenerators by employing silane-based self-assembled monolayers. <i>Journal of Materials Chemistry C</i> , 2020, 8, 4542-4548.	2.7	26
38	Nonfullerene Polymer Solar Cell with Large Active Area of $216\text{ cm}^2$ and High Power Conversion Efficiency of 7.7%. <i>Solar Rrl</i> , 2019, 3, 1900071.	3.1	25
39	Enhanced stability and performance of air-processed perovskite solar cells via defect passivation with a thiazole-bridged diketopyrrolopyrrole-based $\pi$ -conjugated polymer. <i>Journal of Materials Chemistry A</i> , 2020, 8, 8593-8604.	5.2	24
40	A New $\text{sp}^2$ - $\text{sp}^2$ Dialkylethylene-Bridged Heptacyclic Ladder-Type Arene for High Efficiency Polymer Solar Cells. <i>Advanced Energy Materials</i> , 2013, 3, 457-465.	10.2	22
41	Designing bimetallic Ni-based layered double hydroxides for enzyme-free electrochemical lactate biosensors. <i>Sensors and Actuators B: Chemical</i> , 2021, 346, 130505.	4.0	22
42	Formation of Nanostructured Fullerene Interlayer through Accelerated Self-Assembly and Cross-Linking of Trichlorosilane Moieties Leading to Enhanced Efficiency of Photovoltaic Cells. <i>Macromolecules</i> , 2013, 46, 4781-4789.	2.2	21
43	The effect of mechanical traction on low back pain in patients with herniated intervertebral disks: a systemic review and meta-analysis. <i>Clinical Rehabilitation</i> , 2020, 34, 13-22.	1.0	21
44	Enhanced Performance of Organic Thin Film Solar Cells Using Electrodes with Nanoimprinted Light-Diffraction and Light-Diffusion Structures. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 6164-6169.	4.0	20
45	Intense Raman scattering on hybrid Au/Ag nanoplatfoms for the distinction of MMP-9-digested collagen type-I fiber detection. <i>Biosensors and Bioelectronics</i> , 2015, 72, 61-70.	5.3	18
46	Manipulation of optical field distribution in ITO-free micro-cavity polymer tandem solar cells via the out-of-cell capping layer for high photovoltaic performance. <i>Journal of Materials Chemistry A</i> , 2016, 4, 961-968.	5.2	16
47	High-performance printable hybrid perovskite solar cells with an easily accessible n-doped fullerene as a cathode interfacial layer. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 31836-31844.	1.3	15
48	An electrostatically self-assembled fluorinated molecule as a surface modification layer for a high-performance and stable triboelectric nanogenerator. <i>Journal of Materials Chemistry A</i> , 2021, 9, 4230-4239.	5.2	15
49	Efficient and Stable Vacuum-Free-Processed Perovskite Solar Cells Enabled by a Robust Solution-Processed Hole Transport Layer. <i>ChemSusChem</i> , 2017, 10, 1981-1988.	3.6	14
50	Increased risk of major depression subsequent to a first-attack and non-infection caused urticaria in adolescence: a nationwide population-based study. <i>BMC Pediatrics</i> , 2014, 14, 181.	0.7	13
51	Toward Long-Term Stable and Efficient Large-Area Organic Solar Cells. <i>ChemSusChem</i> , 2017, 10, 2778-2787.	3.6	12
52	Achieving High Power Density and Long-Term Stable Flexible Triboelectric Nanogenerators through Surface Functionalization of High Work-Function Electrode with Cationic Thiol-Based Self-Assembled Monolayer. <i>Advanced Materials Technologies</i> , 2021, 6, 2000985.	3.0	11
53	The influence of UV filter and Al/Ag moisture barrier layer on the outdoor stability of polymer solar cells. <i>Solar Energy</i> , 2020, 199, 308-316.	2.9	10
54	Large-area blade-coated organic solar cells processed from halogen-free solvent. <i>Organic Electronics</i> , 2019, 75, 105376.	1.4	9

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55	Clinical non-superiority of technology-assisted gait training with body weight support in patients with subacute stroke: A meta-analysis. <i>Annals of Physical and Rehabilitation Medicine</i> , 2020, 63, 535-542.	1.1	9
56	Effects of protein supplementation on aerobic training-induced gains in cardiopulmonary fitness, muscle mass, and functional performance in chronic stroke: A randomized controlled pilot study. <i>Clinical Nutrition</i> , 2020, 39, 2743-2750.	2.3	9
57	Thermoelectric properties of electrically stressed Sb/Bi <sup>2</sup> Te multilayered films. <i>Journal of Applied Physics</i> , 2010, 107, .	1.1	8
58	N-type Conjugated Polymer as Multifunctional Interfacial Layer for High-Performance and Ultra-Stable Self-Powered Photodetectors Based on Perovskite Nanowires. <i>Advanced Functional Materials</i> , 0, , 2108356.	7.8	8
59	An Initial Attack of Urinary Stone Disease Is Associated with an Increased Risk of Developing New-Onset Irritable Bowel Syndrome: Nationwide Population-Based Study. <i>PLoS ONE</i> , 2016, 11, e0157701.	1.1	7
60	The Impact of Emergency Interventions and Patient Characteristics on the Risk of Heart Failure in Patients with Nontraumatic OHCA. <i>Emergency Medicine International</i> , 2019, 2019, 1-10.	0.3	7
61	Leakage-free solution-processed organic light-emitting diode using a ternary host with single-diode emission area up to 6 Å <sup>2</sup> –11.5 cm <sup>2</sup> . <i>RSC Advances</i> , 2019, 9, 10584-10598.	1.7	5
62	Thermally Stable High-Performance Polymer Solar Cells Enabled by Interfacial Engineering. <i>ChemSusChem</i> , 2018, 11, 2429-2435.	3.6	4
63	Urticaria Increases the Risk of Depression in Adult Patients: A National Database Study. <i>Journal of Neuroscience and Neuroengineering</i> , 2013, 2, 465-469.	0.2	2
64	10.4: Leakage-free solution organic light-emitting diode using ternary host with single-diode emission area up to 6 Å <sup>2</sup> –11.5 cm <sup>2</sup> . <i>Digest of Technical Papers SID International Symposium</i> , 2019, 50, 103-106.	0.1	0
65	Clinical treatment and medication in decreasing the development of major depression caused by spinal fracture. <i>Journal of International Medical Research</i> , 2020, 48, 030006052097288.	0.4	0
66	Effect of dialyzer membranes on mortality in uremic patients undergoing long-term hemodialysis: A Nationwide population-based study using the Taiwan Dialysis Registry Data System 2005–2012. <i>Therapeutic Apheresis and Dialysis</i> , 2021, , .	0.4	0